

2020 State of Telemedicine Report

Examining Patient Perspectives and Physician Adoption of Telemedicine Since the COVID-19 Pandemic

SEPTEMBER 2020



 doximity

The healthcare industry has experienced an unprecedented rise in the use of telemedicine amidst the COVID-19 pandemic, creating a dramatic and fundamental shift in the way care is delivered. In an effort to slow the spread of the virus, mandated shelter-in-place orders and social distancing regulations across the country restricted in-person office visits to emergency care only. Telemedicine quickly rose as the safest and most efficient means to deliver non-emergency care outside the walls of a doctor's office.

Physician and patient adoption of telemedicine continues to rise – and the benefits are clear: ease-of-use, more flexibility, and reduction in cost of delivery. In addition, advances in telemedicine technology could have the potential to address long-standing issues in health equity for underserved and minority communities, by increasing access to specialists for patients based in rural and underserved areas.

Doximity researchers estimate more than 20% of all medical visits will be conducted via telemedicine in 2020, which represents \$29.3 billion of medical services. Similarly, our researchers predict that up to \$106 billion of current U.S. healthcare spend could be virtualized by 2023.

While debate still looms on the specifics of insurance reimbursement for virtual visits, healthcare stakeholders and lawmakers have already taken

steps to ensure telehealth services continue once the pandemic ends. In August, the Federal Communications Commission (FCC) unanimously approved [\\$200 million](#) in telehealth funding¹ and within the same month, the Centers for Medicare & Medicaid Services (CMS) [announced](#) proposed changes to expand telehealth permanently², strongly suggesting that telemedicine has come into its own.

In order to better understand the evolving role of telemedicine, Doximity researchers examined three important aspects of its use as a clinical tool. First, we conducted a comprehensive inventory of patient's changing attitudes towards, and their experience with, telemedicine as a replacement for in-person visits to the doctor's office. This was done with a survey of over 2,000 U.S. adults that was fielded on July 20, 2020, shortly after the initial shelter-in place orders were instituted. We also updated a 2019 telemedicine study, with a year-over-year analysis of Doximity physician member profiles to determine whether there had been growth in doctors self-reporting telehealth as a skill. To understand how physicians are using virtual care tools, we analyzed adoption data from our own telemedicine feature set, which has grown in the first half of 2020 to over 100,000 regular physician users. Lastly, we reviewed recent studies that examined the disparities in medicine, specifically, patient access to telemedicine technology.

In summary, our study found high adoption of telemedicine among patients and physicians alike, with strong evidence indicating that this shift represents a true change in how medicine is delivered in the U.S. Moreover, we anticipate that demand for telehealth service options will continue to grow quickly, and care providers may even find themselves competing to provide the best telemedicine experience. Major hospital systems and private practices alike will need to implement safe, secure, and easy-to-use telehealth solutions to meet their patient expectations.

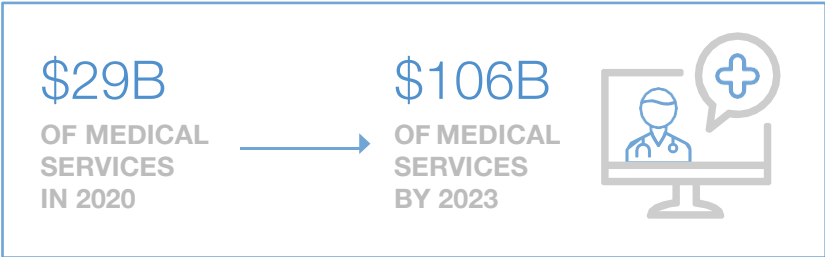
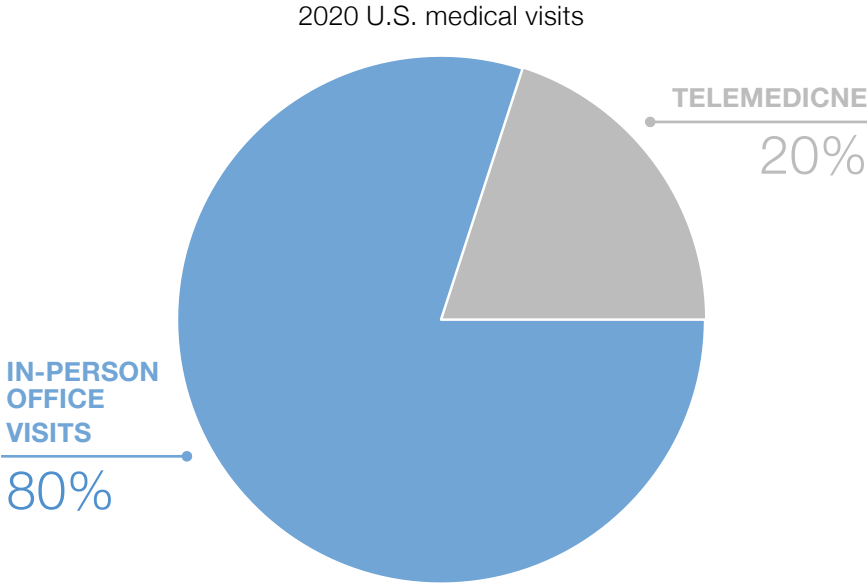
KEY FINDINGS

Market Analysis

Looking Ahead – Telemedicine in 2020 and beyond

In our analysis of private claims data, we estimate that over 20% of all medical visits in the U.S. will be conducted via telehealth this year, representing \$29 billion of medical services in 2020.

We also anticipate much of the Medicare, Medicaid, and privately insured office visits will be virtualized in coming years. Telehealth will divert a significant percentage of emergency department visits, and become an important adjunct to home healthcare support. This will account for upwards of \$106 billion by 2023.



We asked 2,000 U.S. adults -- half who identified as having a chronic illness -- about their attitudes and preferences towards telemedicine starting in July 2020

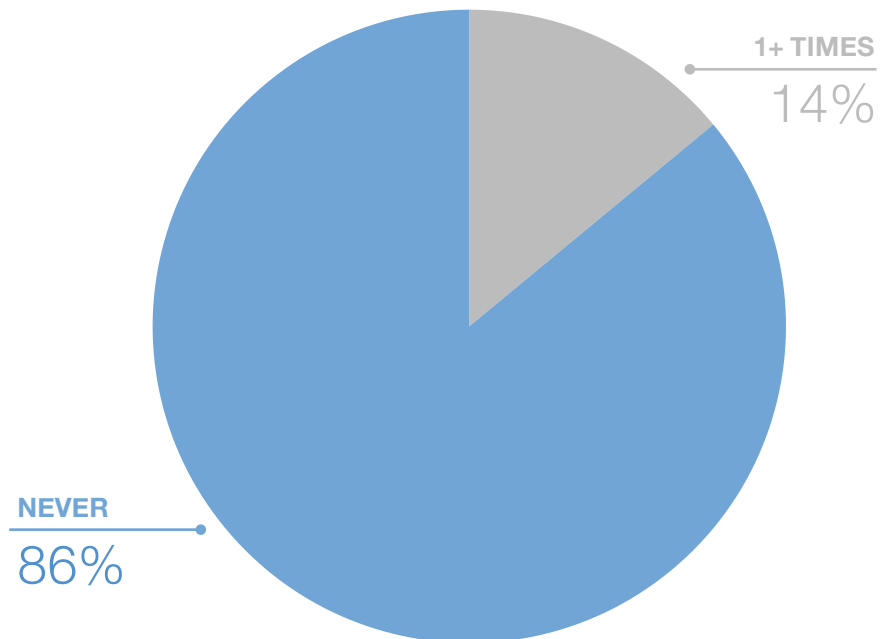
KEY FINDINGS

Patient Insights

Before COVID-19, Most Americans Hadn't Done a Virtual Visit

Before the COVID-19 pandemic, only 14% of Americans had done telemedicine at least once. The number of patients with a chronic condition was significantly higher, with 35% reporting that they had engaged with their physician via telemedicine.

Prior to the pandemic, how many of your healthcare visits had been conducted via telehealth annually?



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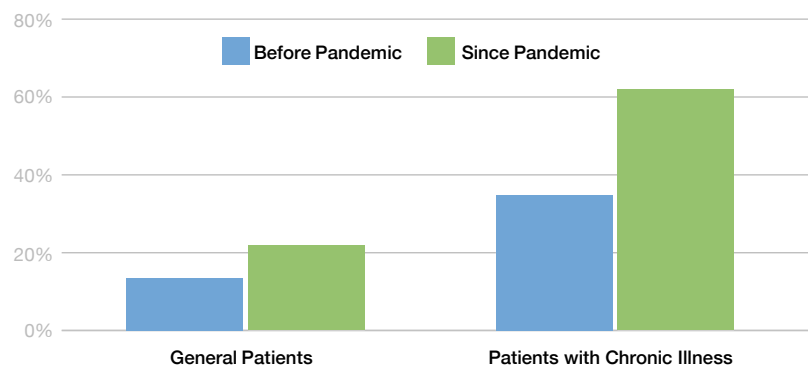
The Pandemic Has Driven Telemedicine Adoption

The number of Americans who reported having participated in at least one telehealth visit since the COVID-19 outbreak has increased by 57%. For those with a chronic illness, this increase is even higher at 77%.

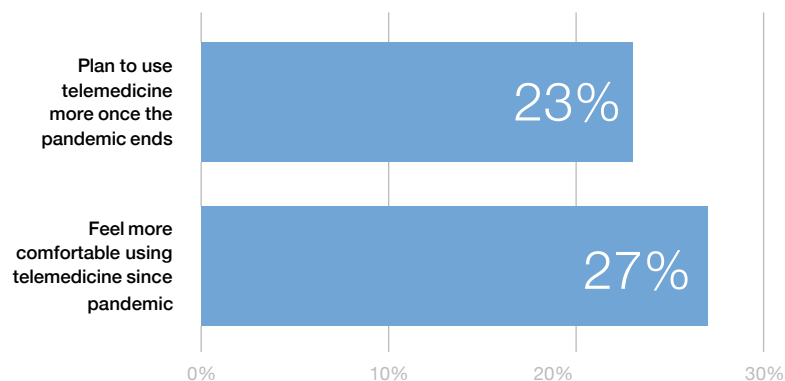
23% of respondents said they plan to use telehealth once the pandemic ends. And 27% of respondents said they feel more comfortable using telemedicine since the pandemic.

We will likely continue to see these numbers rise as the technology improves, and as more doctors and hospitals offer it as an alternative to in-person visits.

Americans Who Have Participated in a Telemedicine Visit at Least Once



Patient Telemedicine Use



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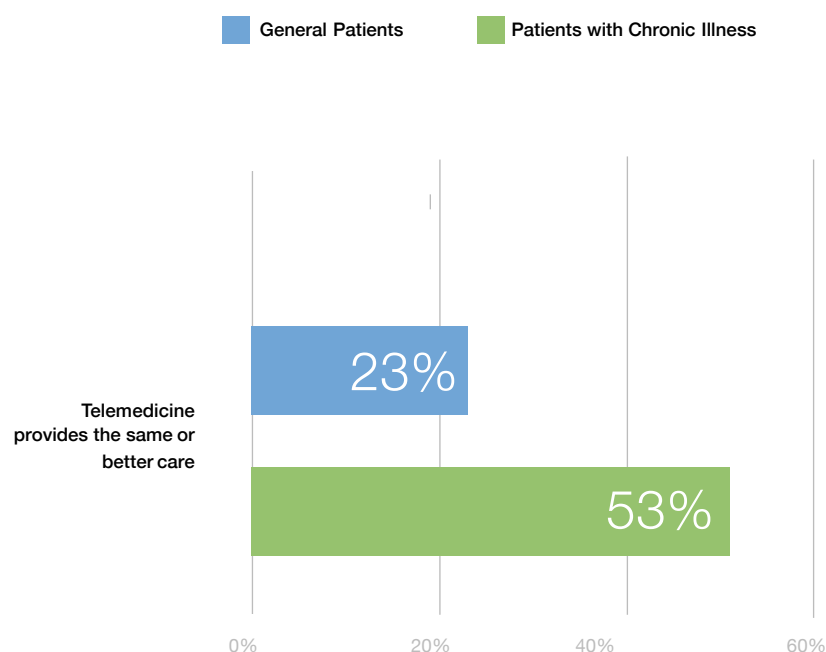
Patient Insights

Patients Feel Telemedicine Provides the Same or Better Care Than In-person Visits

28% of Americans reported they feel telemedicine is the same or better quality of care when compared to in-person doctor visits, while 53% of those with a chronic illness feel it is the same or better.

These findings align with research published by Penn Medicine³, which found 67% of patients surveyed viewed its video and telephone appointments held during the peak of the COVID-19 pandemic as “positive and acceptable substitutes to in-person appointments.”

Comparing Telemedicine to In-person Doctor Visits



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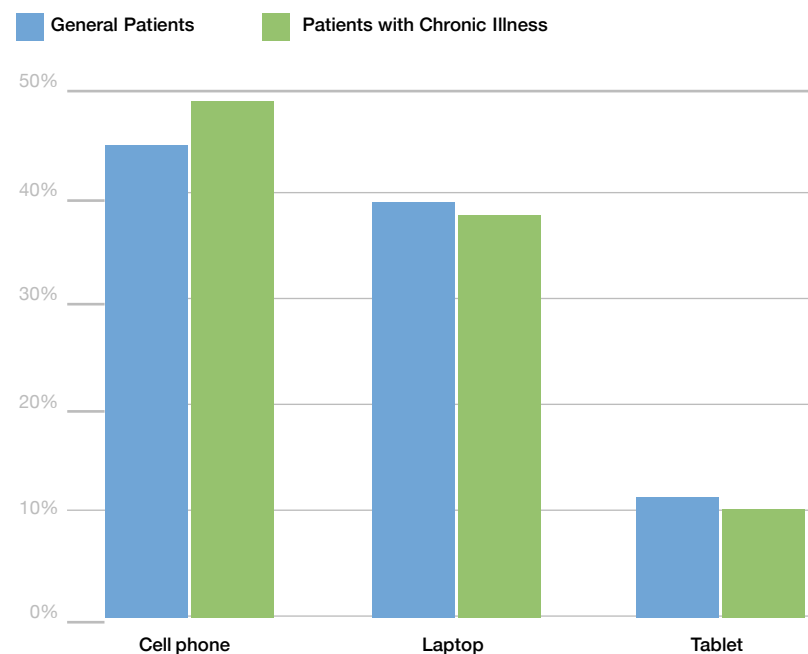
Patient Insights

Americans Prefer Cell Phones for Telemedicine Visits

When asked their preferred device for conducting telemedicine visits, 45% of Americans ranked cell phones as their preferred device, and 39% preferred laptops.

This underscores how patients may want to communicate with their doctor, which is the same way they communicate with family, friends, and employers— using their cell phones. With continued innovation and advances in telemedicine technology, some telehealth tools only require patients to have access to a smartphone. Since the clear majority of Americans (81%) already own a smartphone⁴, telehealth can help bridge the digital divide in medicine.

Telemedicine Device of Choice



We also explored telemedicine adoption among U.S. physicians on the Doximity network, examining variables such as gender, age, specialty, location and doctors who self-reported 'telemedicine' as a skill. With over 70 percent of all U.S. doctors as members, Doximity can shed light on physician attitudes nationally.

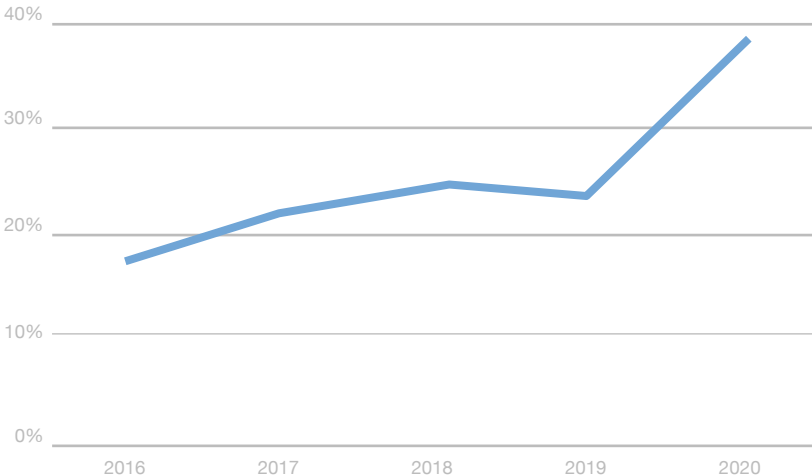
KEY FINDINGS

Physician Adoption

Physicians Reporting 'Telemedicine' as a Skill Nearly Doubled Between 2019-2020

In [last year's study](#)⁵, we found the number of physicians who self-reported telemedicine as a skill had been increasing annually by 20% between 2015 and 2018. That number has nearly doubled, increasing by 38% between 2019 and 2020.

Yearly Growth Rate in Physicians Listing 'Telemedicine' as a Skill



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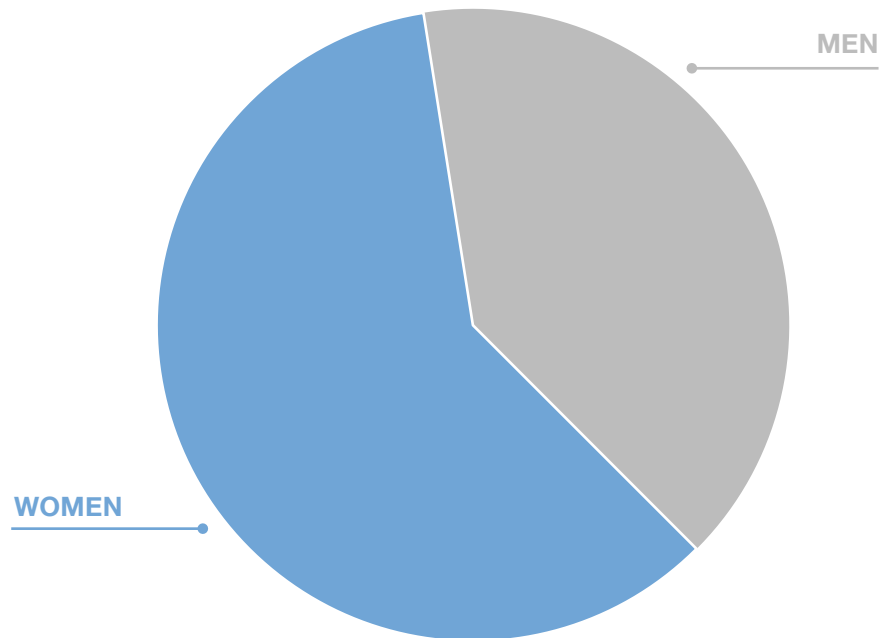
KEY FINDINGS

Physician Adoption

Female Doctors Are Adopting Telemedicine at a Higher Rate Than Their Male Counterparts

In last year's study, our data showed female physicians were engaging with telemedicine job ads at a higher rate (10% more) relative to their male counterparts.

In this year's study, we analyzed the adoption of telemedicine tools and again found higher engagement rates among female physicians, who are using telemedicine at a 24% higher rate than their male colleagues.



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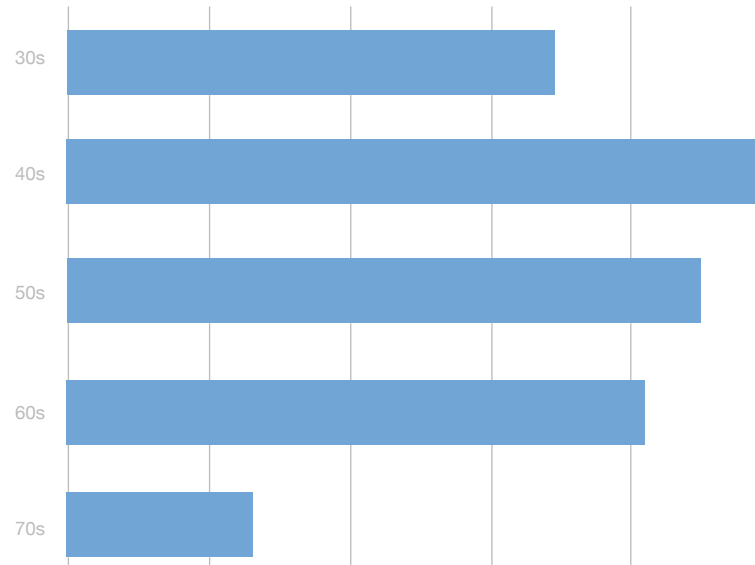
KEY FINDINGS

Physician Adoption

Older Physicians Are Using Telemedicine More Often Than Younger Ones

When analyzing physician adoption of telemedicine by age, our data showed doctors in their 40s and 50s are using telemedicine more often than their younger colleagues.

Physician Adoption of Telemedicine by Age Group



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KEY FINDINGS

Physician Adoption

Top 10 Specialties Using Telemedicine Frequently Treat Chronic Illnesses

There is a clear overlap between specialties that are using telemedicine the most, and those specialties that manage chronic illnesses, such as endocrinology and rheumatology

Treating long-term chronic conditions like diabetes and arthritis require frequent patient visits, but they don't always need to be in-person. For patients that require long-term care, telemedicine tools can reduce taxing trips to hospitals or clinics.

Top 10 Specialties Using Telemedicine

1. Endocrinology
2. Rheumatology
3. Gastroenterology
4. Nephrology
5. Cardiology
6. Urology
7. Neurology
8. Geriatrics
9. Hematology/Oncology
10. Pulmonology

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Physician Adoption

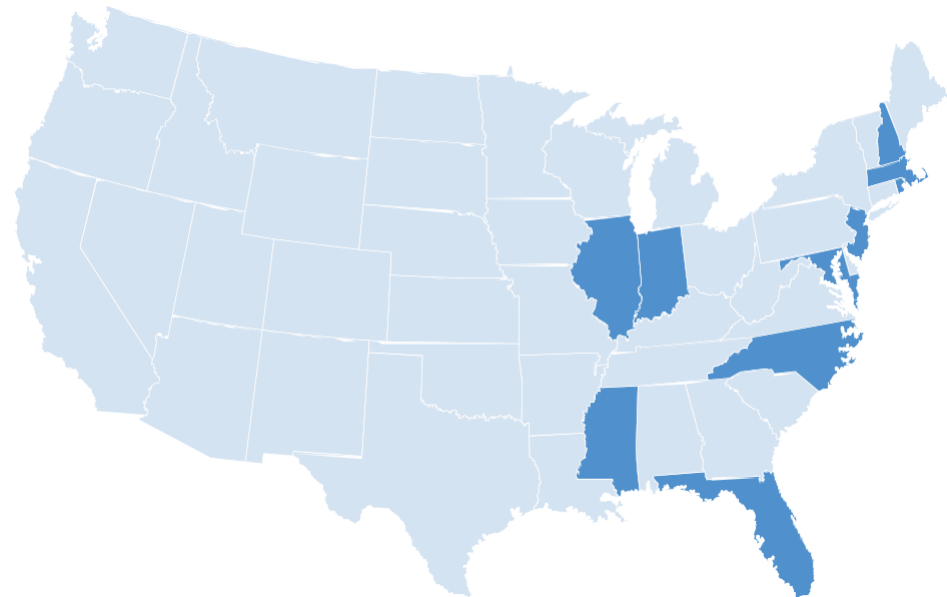
Physicians in Larger Metro Areas & East Coast States Are Using Telemedicine the Most

Massachusetts is leading the adoption of telemedicine, followed closely by North Carolina and New Jersey. Overall, we've found that urban areas are adopting telemedicine the most quickly, and the states using telemedicine the least are mostly comprised of rural and suburban regions. This adoption pattern is somewhat counterintuitive given rural areas have the most to gain from providing telemedicine options.

In addition, many of the top telehealth states are well-known for their quality and access to care, have large urban centers with major healthcare facilities, and have been national leaders in healthcare innovation.

Top 10 States Adopting Telemedicine

- | | | | |
|----|----------------|-----|---------------|
| 1. | Massachusetts | 6. | Rhode Island |
| 2. | North Carolina | 7. | Indiana |
| 3. | New Jersey | 8. | New Hampshire |
| 4. | Maryland | 9. | Mississippi |
| 5. | Illinois | 10. | Florida |



BRIDGING THE GAP

Health Equity in Medicine

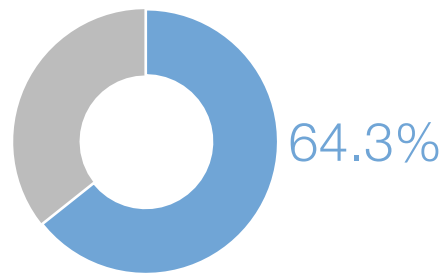
Data Insights Reveal Disparities in Access To Telemedicine Technology

It's well understood that access to healthcare in the U.S. is not evenly distributed. For those in rural and underserved communities, the nearest clinic may be hours away. And unfortunately, rural communities also suffer from more limited access to broadband internet, which restricted the ability of many in rural communities to access telemedicine pre-pandemic⁶.

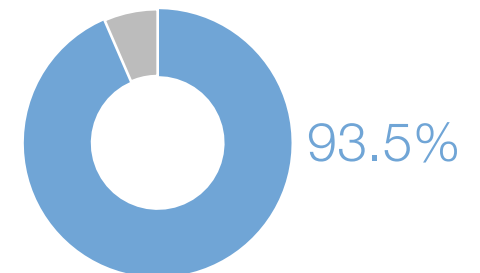
Additionally, research shows that Black and Hispanic Americans own laptops at lower rates than White Americans, further dividing pre-pandemic access to telemedicine.

Broadband internet access

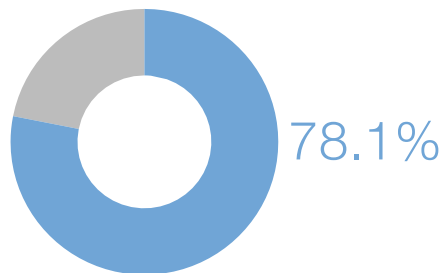
Among households with incomes of \$25,000 or lower



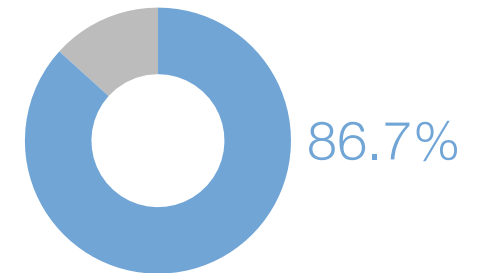
Among households with incomes of \$50,000 or lower



Among households located in non-metropolitan statistical areas



Among households located in metropolitan statistical areas



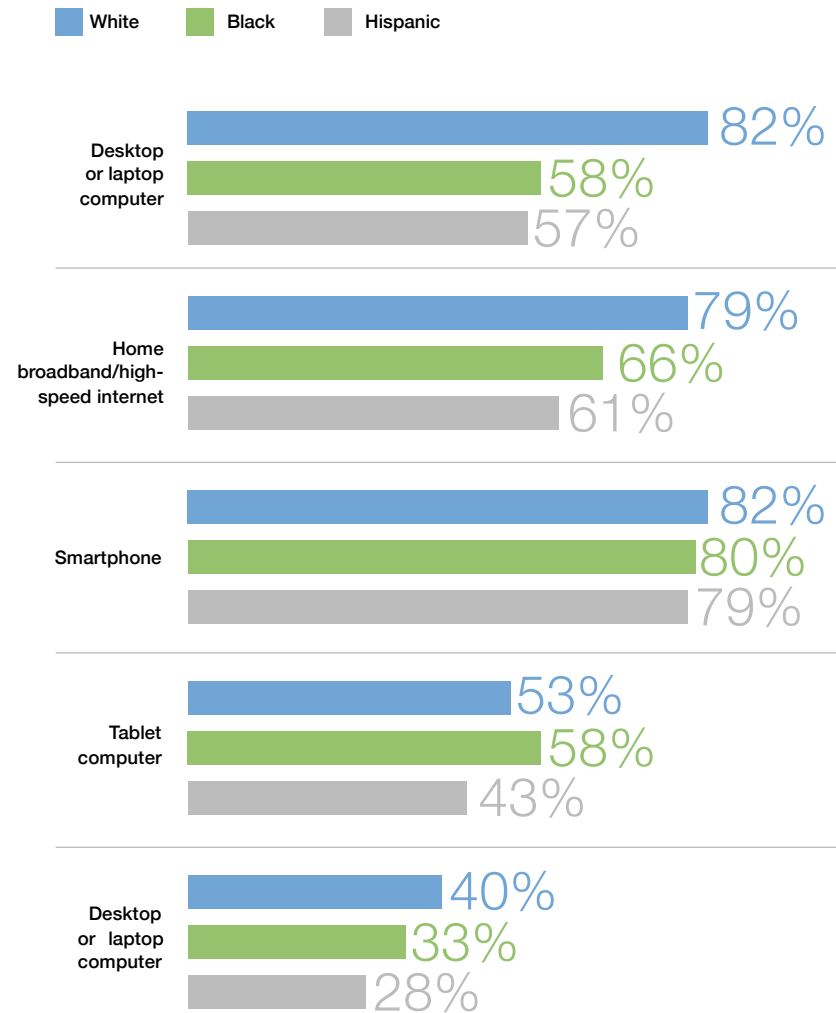
BRIDGING THE GAP

Health Equity in Medicine

Recent Telemedicine Advancements Help Improve Access To Care

The COVID-19 pandemic has driven innovation in digital health, which has also led to the promotion of health equity. Prior to the pandemic, most patients were required to have access to broadband/high-speed internet in order to participate in a telemedicine visit. Thanks to recent advances in technology, patients today can see their doctor using only a smartphone⁷; Since Black and Hispanic Americans own a smartphone at nearly identical rates as White Americans⁷, this new capability is helping bridge the digital divide in medicine.

% of U.S. adults in each group who say they have the following*



Conclusion

Driven by the impacts of the pandemic, telehealth is rapidly growing as an effective, efficient healthcare delivery tool. Our analysis of telemedicine trends among both patients and physicians paints a stark picture: telemedicine may be considered a “must have” option for patients and physicians moving forward.

From the patient perspective, we saw a massive rise in adoption since the outbreak of the pandemic, as well as a large percentage of patients reporting the level of care to be the same or better than in-person doctor visits, with some patients indicating they plan to continue using telemedicine after the pandemic ends.

For physicians, more are reporting telemedicine as a specialty than ever before -- especially since the beginning of 2020 -- with the highest rates of use among females, doctors in their 40s, those in states on the east coast states with larger urban populations and those in specialties often treating chronic illnesses. As with any technology, true widespread adoption occurs only when it appeals to myriad of groups. The 2020 pandemic has been a tipping point for telemedicine, bringing it into the homes and practices of millions of Americans with strong results.

Methodology

This study used data for the “Patients Insights” section from a survey Doximity conducted via Pollfish of randomized 2,000 American adults ages 18+. The survey was distributed to two separate groups: those who identified as currently having a chronic illness (1,000 respondents), and those without such conditions (1,000 respondents). The survey was conducted in July 2020.

This study also used data for the “Physician Adoption Insights” section from the Doximity network and use of telemedicine platforms. Profile updates were measured as physicians listed “telemedicine” as a skill on their Doximity profiles. Use of telemedicine services was measured through the use of the Dialer Video service.

In an August 2020 forecast analysis, Doximity researchers analyzed data from [Medical Expenditure Panel Survey](#) and private claims data showing the growth rate in virtual visits in the first half of 2020.

References

1. Next TV (2020, April 1) FCC Approves Framework For 300 Million Telehealth Initiative <https://www.nexttv.com/news/fcc-approves-framework-for-300m-telehealth-initiative>
2. CMS.gov (2020, August 3). Trump Administration Proposes to Expand Telehealth Benefits Permanently for Medicare Beneficiaries Beyond the COVID-19 Public Health Emergency and Advances Access to Care in Rural Areas. <https://www.cms.gov/newsroom/press-releases/trump-administration-proposes-expand-telehealth-benefits-permanently-medicare-beneficiaries-beyond>
3. Penn Medicine. (2020, June 24). Research Shows Patients and Clinicians Rated Telemedicine Care Positively During COVID-19 Pandemic. <https://www.pennmedicine.org/news/news-releases/2020/june/patients-and-clinicians-rated-telemedicine-care-positively-during-covid>
4. Pew Research Center. (2019, June 12). Mobile Fact Sheet. <https://www.pewresearch.org/internet/fact-sheet/mobile/>
5. Doximity. (2019, July). 2019 Telemedicine and Locum Tenens Opportunities Study <https://s3.amazonaws.com/s3.doximity.com/press/2019TelemedicineAndLocumTenensOpportunitiesStudy.pdf>
6. SHADAC. (2020, March 27). Internet Access Measures the Impact of the Digital Divide and COVID-19. <https://www.shadac.org/news/internet-access-measures-impact-digital-divide-and-covid-19>
7. Smith, Whitney R. Smith, MD; Atala, Anthony J., MD, FACS; Terlecki, Ryan P. MD, FACS, Kelly, Erin E., MSN, ANP-BC; Matthews, Catherine A. MD, FACS, FACOG. (2020, April 30). Implementation Guide for Rapid Integration of an Outpatient Telemedicine Program During the COVID-19 Pandemic. [https://www.journalacs.org/article/S1072-7515\(20\)30375-6/pdf](https://www.journalacs.org/article/S1072-7515(20)30375-6/pdf)
8. Perrin, Andrew and Turner, Erica. (2019, August 20). Smartphones help blacks, Hispanics bridge some – but not all – digital gaps with whites. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/08/20/smartphones-help-blacks-hispanics-bridge-some-but-not-all-digital-gaps-with-whites/>
9. Medical Expenditure Panel Survey (2017) <https://www.meps.ahrq.gov/mepsweb/>



Founded in 2011, Doximity connects physicians and advanced practice clinicians to make them more successful and productive. Doximity is the largest professional medical network with over 70 percent of all U.S. physicians as members, enabling collaboration across specialties and every major medical center. Doximity is based in San Francisco and was created by the founders of Epocrates and Rock Health.



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